

**VERSION OF CLAIM AMENDMENTS  
WITH MARKINGS TO SHOW CHANGES MADE**

1. (Twice Amended) A heparin-binding protein comprising at least one covalently bonded sugar chain, wherein the at least one sugar chain is selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan, an N-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan and combinations thereof, wherein the residual activity of the heparin-binding protein is increased by adding the at least one covalently bonded sugar chain.

4. (Twice Amended) The heparin-binding protein of claim 1, wherein the at least one sugar chain is covalently bonded through a peptide to which the at least one sugar chain [can be] is added.

5. (Thrice Amended) The heparin-binding protein of claim 4, wherein the heparin-binding protein comprising the at least one covalently bonded sugar chain comprises:

(a) a protein consisting of the amino acid sequence of SEQ ID NO: 1, 17, 19, 21, 23, or 29; or

(b) a protein which consists of the amino acid sequence of SEQ ID NO: 1, 17, 19, 21, 23, or 29 having a deletion, substitution, addition or modification of at least one amino acid, wherein the heparin-binding protein comprising at least one sugar chain has FGF activity and wherein the peptide to which the sugar chain [can be] is added comprises a proteoglycan core protein or a part thereof.

6. (Twice Amended) The heparin-binding protein of claim 1, wherein the at least one sugar chain is bonded to the heparin-binding protein at a site forming a turn in the secondary structure, or at a site near one of the ends, or at a site at which addition of the sugar chain will not change the tertiary structure of said protein [greatly] sufficiently to cause said protein to incur a loss of activity.

14. (Twice Amended) A pharmaceutical composition containing the heparin-binding protein of any one of claims 1 [and] or 3-6 as an active ingredient.

16. (Twice Amended) A heparin-binding protein comprising at least one

covalently bonded sugar chain, wherein the at least one sugar chain is selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan, an N-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan and combinations thereof, wherein the at least one sugar chain is covalently bonded through a peptide to which the sugar chain [can be] is added, thereby increasing the residual activity of the heparin-binding protein by adding the at least one covalently bonded sugar chain.

18. (Amended) An improved heparin-binding protein which comprises [A] a heparin-binding protein functionalized by covalently bonding thereto at least one sugar chain, wherein the at least one sugar chain is covalently bonded through a peptide to which the sugar chain [can be] is added thereby increasing the residual activity of the heparin-binding protein, said at least one sugar chain selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan, an N-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan and combinations thereof.

19. (Twice Amended) A heparin-binding protein comprising a plurality of covalently bonded sugar chains, wherein the sugar chains are selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan, an N-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan and combinations thereof, wherein the sugar [chain is] chains are covalently bonded through a peptide to which the sugar [chain can be] chains are added thereby increasing the residual activity of the heparin-binding protein.

20. (Amended) [A] An improved heparin-binding protein comprising a heparin-binding protein containing a peptide sequence to which at least one sugar chain [can be] is covalently bonded, wherein the at least one sugar chain is covalently bonded through [a] the peptide sequence to which the at least one sugar chain [can be] is added, thereby increasing the residual activity of the heparin-binding protein, said at least one sugar chain selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan, an N-linked sugar chain

combined with a sulfated polysaccharide or a glycosaminoglycan and combinations thereof.

Please add the following new claims:

23. An improved heparin-binding protein which comprises a heparin-binding protein modified with covalently bonded sugar chains, the sugar chain being selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan, an N-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan and combinations thereof, wherein the activity of the heparin-binding protein is greater than the activity of the unmodified protein.

24. The heparin-binding protein of claim 1, wherein the at least one sugar chain is heparan sulfate.

25. The heparin-binding protein of claim 16, wherein the at least one sugar chain is heparan sulfate.

26. The heparin-binding protein of claim 18, wherein the at least one sugar chain is heparan sulfate.

27. The heparin-binding protein of claim 19, wherein the at least one sugar chain is heparan sulfate.

28. The heparin-binding protein of claim 20, wherein the at least one sugar chain is heparan sulfate.